

WHAT IS CLAIMED IS:

1. In a wireless communication system comprising a Base Station connected with a mobile unit, a method of synchronizing at least one neighboring Base Station to the Base Station connected with the mobile unit comprising:

from the Base Station connected with the mobile unit, sending call parameters and rough synchronization information to the at least one neighboring Base Station; and

at the at least one neighboring Base Station, monitoring transmissions of at least one of:

the Base Station connected with the mobile unit;

the mobile unit; and

a beacon signal from a beacon transmitter which is within range of the at least one neighboring Base Station and the Base Station connected with the mobile unit.

2. Method, according to claim 1, wherein the mobile unit is a device selected from the group consisting of:

telephone handset, standard cordless telephone handset, cellular telephone handset, personal data device, personal digital assistant (PDA), computer, laptop computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

3. In a wireless communication system comprising a Base Station connected with a mobile unit, a method of detecting and synchronizing with the mobile unit prior to receiving a handoff of a session with the mobile unit, comprising:

from the Base Station connected with the mobile unit, sending rough synchronization information to at least one neighboring Base Station;

at the neighboring Base Station, performing a wide-range search for "target" signals having the correct timing for a mobile unit, based on the rough synchronization information provided by the Base Station which is connected with the

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mobile unit;

narrowing the search for an actual signal from the mobile unit;

acquiring the target signal; and

synchronizing the neighboring Base Station to the Base Station connected with the mobile unit.

4. Method, according to claim 3, wherein:

the mobile unit is equipped with a short-range wireless communication transmitter/receiver.

5. Method, according to claim 3, wherein the mobile unit is a device selected from the group consisting of:

telephone handset, standard cordless telephone handset, cellular telephone handset, personal data device, personal digital assistant (PDA), computer, laptop computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

6. Method, according to claim 3, further comprising:

providing communication links between the Base Stations, wherein the communication links between the Base Stations are selected from the group consisting of RF links and land lines; and

transferring connection status information and rough synchronization information between the Base Stations over the communications links.

7. Method, according to claim 3, wherein:

the Base Stations and the Switch are connected via a wired or wireless local area network (LAN).

8. Method, according to claim 3, wherein:

the wireless communication system comprises a wireless private branch exchange (WPBX) handling calls from mobile units comprising handsets.

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